a regressor for obtaining a predictive model of said process over said input space by regression from said measurements, thereby to provide said automatic process control. --

Amend Claim 2 to read as follows:

-- 2. (Amended) A system according to claim 1, wherein said predictive model comprises a first formula describing the process. --

Amend Claim 3 to read as follows:

-- 3. (Amended) A system according to claim 2, wherein said points comprise at least input boundaries of said process. --

Amend Claim 4 to read as follows:

-- 4. (Amended) A system according to claim 3, wherein said points comprise further desired points. --

Amend Claim 5 to read as follows:

5. A system according to claim 4, wherein said points are definable by a geometric spacing across said input space.

Amend Claim 6 to read as follows:

-- 6. (Amended) A system according to claim 5, wherein said geometric spacing is selectable to give an even spread of points across said input space. --

Amend Claim 9 to read as follows:

-- 9. (Amended) A system according to claim 2, wherein said predictive model is any one of a group comprising a linear formula, a linear formula with interaction between inputs, a quadratic formula and a quadratic formula with interaction between inputs. --

Amend Claim 10 to read as follows:

-- 10. (Amended) A system according to claim 1, wherein said input space is divisible into discrete regions, and wherein said predictive model comprises predicted process. --

Amend Claim 11 to read as follows:

-- 11. (Amended) A system according to claim 10, wherein said input space is divisible into discrete regions, and wherein said predictive model comprises predicted outputs associated with each discrete region. --

Amend Claim 12 to read as follows:

-- 12.(Amended)A system according to claim 11, wherein results for said predicted outputs are producible by said predictive model and obtainable from running said process, said results being interchangeable within said empirical model. --

Amend Claim 13 to read as follows:

-- 13. (Amended) A system according to claim 12, further having an empirical results quantity assessor for interchanging results produced by said predictive model with results obtained from running said process when said results obtained from

running said process are assessed to be statistically significant according to at least one predetermined criterion of significance. --

Amend Claim 14 to read as follows:

-- 14. (Amended) A system according to claim 12, having a prediction quality assessor for interchanging results obtained by running said process with results obtained from said predictive model when a prediction of said predictive model is assessed to diverge significantly from an outcome of said process according to at least one predetermined criterion of significance. --